

Date of Issuance: March 2, 2011

1.0 INTRODUCTION: General Services: Bid Request 5-110330FR

- 1.1 This Request For Bid (RFB) seeks bids from qualified organizations to provide **INSTALLATION OF EXTERNALLY BONDED FIBER REINFORCED POLYMER (FRP) COMPOSITE SYSTEM TO STRENGTHEN CAST-IN-PLACE CONCRETE PILES**, with an *anticipated contract period from the date of Notice to Proceed to the completion date of September 1, 2011*, to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT).

Your written bid must be mailed in a sealed envelope or box, or else delivered by hand or courier service (UPS, Federal Express, etc.) to be received on or before the date and time specified above, at the office of the **RFB Coordinator**:

Ms. Frankie J. Ryan, MPA, CPPO, CPPB
Missouri Department of Transportation
General Services - Procurement
830 MoDOT Drive, Jefferson City, MO 65109 (physical address)
P.O. Box 270, Jefferson City, MO 65102 (mailing address)
Jefferson City, MO 65102

All documents must be sealed and the outermost wrapping should be clearly marked "**RFB 5-110330FR, Installation of Externally Bonded Fiber Reinforced Polymer (FRP) Composite System to Strengthen Cast-In-Place Concrete Piles**". All questions regarding the RFB shall be submitted to Ms. Frankie Ryan. Sealed bids must be received by the Missouri Department of Transportation, Jefferson City, Missouri, on or before **2:00 P.M., CDST, March 30, 2011**. At that time bids will be publicly opened and read at MoDOT General Services, 830 MoDOT Drive, Jefferson City, MO 65109.

The date specified for the receiving of bids is a firm deadline and all bids must be received at the designated office by that time. The Department does not recognize the U.S. Mail, United Parcel Service, Air Express, or any other organization, as its agent for purposes of accepting bids. Any bids arriving at the designated office after the deadline specified will not be considered.

It is the sole responsibility for all bidders to check the website for any addenda issued on this solicitation and to ensure their bid price reflects any addendum. The MHTC reserves the right to reject any or all bids for any reason whatsoever.

Respectfully,

Frankie J. Ryan, MPA, CPPO, CPPB
Senior Procurement Agent
(573) 522-9481

1.2 **GENERAL INFORMATION**

1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of *Installation of Externally Bonded Fiber Reinforced Polymer (FRP) Composite System to Strengthen Cast-In-Place Concrete Piles* as set forth herein.

1.2.2 **Organization:** This document, referred to as a Request for Bid (RFB), is divided into the following parts:

- 1) Introduction and General Information
- 2) Scope of Work
- 3) General Bid Information and ** **Special Information on Bidder Prequalification** **
- 4) Pricing Page *(to be signed and submitted with the bid)*
- 5) Notes on Additional Award and Contract Information Requirements
- 6) Bid Bond *(to be executed and submitted with the bid in lieu of a Certified Check, Cashier's Check or Bank Money Order)*
- 7) Signature and Identity of Bidder *(to be signed and submitted with the bid)*
- 8) Anti-Collusion Statement *(to be signed and submitted with the bid)*
- 9) Preference in Purchasing Products *(to be signed and submitted with the bid)*
- 10) Domestic Products Procurement Act *(to be signed and submitted with the bid)*
- 11) Worker Eligibility Verification Affidavit *(to be signed and submitted prior to award)*
- 12) Missouri Service-Disabled Veteran Business Preference *(to be signed and submitted with the bid)*
- 13) Attachment A: Bridge Location Map-Dunklin County, Missouri

1.3 **RFB SCHEDULE OF EVENTS**

1.3.1 The following Schedule of Events represents the MHTC's best estimate of the schedule that will be followed.

1.3.2 The MHTC reserves the right at its sole discretion to expand this schedule, as it deems necessary, without any notification except for the deadline date for submitting a bid.

EVENT	DATE	TIME (on or before)
MODOT Issues Bid Documents	March 2, 2011	4:00 pm CST
Deadline for Written Comments	March 16, 2011	4:00 pm CDST
Deadline for MoDOT Issuing Responses to Written Comments	March 23, 2011	4:00 pm CDST
Deadline for Submitting Bids	March 30, 2011	2:00 pm CDST
Anticipated Contract NTP	May 23, 2011	4:00 pm CDST

2.0 SCOPE OF WORK

2.1 General

2.1.1 The work is to be performed on octagonal shaped concrete piling (16-inch) on the Route US 62 Bridge over the St. Francis River in Dunklin County, Missouri. The structure borders the Arkansas state line. All work is on the Missouri side of the bridge. The structure number (Missouri) is H0927.

2.1.2 The following piling numbers are designated for repairs (with noted length of observed deficiency). The indicated system for the repair is also noted.

- | | | |
|---------------------|-----|---------------|
| • Bent 22, Column 3 | 12" | <i>Carbon</i> |
| • Bent 23, Column 4 | 12" | <i>Carbon</i> |
| • Bent 25, Column 2 | 12" | <i>Carbon</i> |
| • Bent 28, Column 1 | 12" | <i>Carbon</i> |
| • Bent 31, Column 1 | 30" | <i>Carbon</i> |
| • Bent 33, Column 1 | 18" | <u>Glass</u> |
| • Bent 33, Column 2 | 18" | <u>Glass</u> |
| • Bent 33, Column 3 | 18" | <u>Glass</u> |
| • Bent 33, Column 4 | 18" | <u>Glass</u> |

2.1.3 The repair areas are all at the top of the piling, directly underneath the beam cap. See photos on Attachment A for typical repair and location. This is an elevated repair approximately 10 feet to 12 feet above the ground (see photos for typical type of landscape).

2.2 Description of Work: *STRENGTHENING OF CAST-IN-PLACE CONCRETE*

- 2.2.1 This specification is intended to define the minimum requirements of structural strengthening using externally bonded fiber reinforced polymer (FRP) composite systems, carbon or glass, as indicated above.
- 2.2.2 The work includes the furnishing of all materials, labor, equipment and services for the supply, installation and finish of all structural strengthening using externally bonded FRP composite system, at the designated substructure locations.
- 2.2.3 The general contractor or subcontractor shall furnish all materials, tools, equipment, transportation, necessary storage, access, labor and supervision required for the proper installation of the externally bonded FRP composite system.

3.0 REFERENCE STANDARDS

3.1 The publications listed below form a part of this specification to the extent referenced. Where a date is given for referenced standards, the edition of that date shall be used. Where no date is given for reference standards, the latest edition available on the date of the Notice of Invitation to Bid shall be used.

3.1.1 International Code Council (ICC)

- ICC AC125, Acceptance Criteria for Concrete and Reinforced and Unreinforced Masonry Strengthening Using Externally Bonded Fiber Reinforced Polymer (FRP) Composite Systems.

- b. ICC AC178, Interim Criteria for Inspection and Verification of Concrete and Reinforced and Unreinforced Masonry Strengthening Using Externally Bonded Fiber Reinforced (FRP) Composite Systems.
- 3.1.2 American Standard for Testing and Materials (ASTM)
 - a. ASTM D3039, Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials.
- 3.1.3 American Concrete Institute (ACI)
 - a. ACI 440.2R-08, Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures.

4.0 MATERIAL QUALIFICATIONS

- 4.1 Materials for the FRP system have been pre-qualified and may be supplied by one of the following manufacturers:
 - 4.1.2 Fyfe Co. LLC (8380 Miralani Drive, San Diego, CA 92126. Tel: 858-642-0694, Fax: 858-444-2982, Email: info@fyfeco.com)
 - 4.1.3 Sika Corp. (201 Polito Avenue, Lyndhurst, NJ 07071. Tel: 800-933-7452, Fax: 201-933-6225, Email: sikaconstruction.com)
- 4.2 Other alternate FRP systems must be able to provide all items listed within Sections 3.0 and 5.0 of this specification with the bid; otherwise, they shall be considered non-compliant.

5.0 SUBMITTALS

- 5.1 Quality Control and Quality Assurance:
 - 5.1.1 Submit product data indicating product standards, physical and chemical characteristics, technical specifications, limitations, installation instructions, maintenance instructions and general recommendations regarding each individual material.
 - 5.1.2 Only epoxy resins will be accepted for construction of FRP systems referenced in this specification. Other resins, such as polyesters/vinyl esters, are not allowed as substitutes. The manufacturer shall clearly define the epoxy resin working time. Any batch that exceeds the batch life shall not be used.
 - 5.1.3 The proposed FRP Systems shall be compliant with ICC AC125 and provide a current ICC Evaluation Service Report, compliant with the 2009 International Building Code (IBC).
 - 5.1.4 Submit a list of completed surface bonded FRP composite strengthening projects completed with the manufacturer's FRP composite system in the past 3 years. The list should include at a minimum of 10 projects with installed FRP system, the dates of work, type, description, amount of work performed, and contact information of owner.
 - 5.1.5 Surface bonded FRP composite system shall be installed by certified applicator with written consent from manufacturer that the contractor has been trained. Certified applicator shall have a minimum of 3 years experience in performing FRP composite retrofits.
 - 5.1.6 The Engineer may suspend the work if the Contractor substitutes an unapproved fiber reinforced composite system or unapproved personnel during construction.
- 5.2 Design and working drawings:

- 5.2.1 The FRP fabric that is proposed shall be specifically intended to repair, strengthen and encapsulate concrete bridge elements. It shall be a high strength, high modulus, fiber fabric, glass or carbon. The system design shall be such as to provide the necessary shear capacity equivalent to 50% stirrup section loss in a #4 bar at 1 ½" spacing over the length of the repair area noted in **section 2.1.2**. No loss of vertical steel section is assumed in the analysis. The length of deficiency includes the immediate zone of deterioration, which is directly below the beam cap. It is up to the supplier to determine the pile length that requires wrapping, the number of wraps, and the amount of overlap.
- 5.2.2 Stamped and signed structural calculations and drawings by a registered professional engineer, in Missouri, must accompany the submittal. Working drawings shall detail the repair schematic, including the number of layers of wrap and required overlap of material.
- 5.2.3 Epoxy tack coat resin shall be a two component, 100% solids, high modulus, high strength structural epoxy with high tack consistency. Epoxy saturating resin shall be two component, 100% solids, high strength, high modulus, low viscosity structural epoxy. Materials shall be specifically designed for use in the FRP system.
- 5.2.4 Working drawings shall detail the type, locations, dimensions, number of layers, and orientation of all FRP materials and coatings to be installed.
- 5.2.5 A list of two different manufacturer approved testing laboratories that can perform the required ASTM D3039 tests as per **Section 12.3** of this specification.
- 5.3 Protective Coating:
- 5.3.1 The protective coating shall be polymer or acrylic based, and shall be resistant to UV rays.
- 5.4 Product Information:
- 5.4.1 Provide an ICC Evaluation Service Report, compliant with the 2009 IBC, for the proposed products.
- 5.4.2 Properties of the composite materials as determined by independent laboratory testing in accordance with ASTM D3039 (tensile modulus, stress and strain).
- 5.4.3 Large-scale structural testing results of the proposed composite system from independent laboratories on similar structural sections.
- 5.4.4 Installation procedures, maintenance instructions, and general recommendations regarding each material to be used.
- 5.4.5 Manufacturer's Material Safety Data Sheets (MSDS) for all materials to be used.
- 5.4.6 Manufacturer's product data sheet indicating physical, mechanical and chemical characteristics of all materials used in the FRP system.
- 5.4.7 Written verification from the manufacturer that their applicator has received the required certifications and training.
- 5.4.8 Certification by the manufacturer that supplied products comply with local regulations controlling use of volatile organic compounds (VOC's).

6.0 PRODUCT DELIVERY, HANDLING AND STORAGE

- 6.1 Deliver epoxy materials in factory-sealed containers with the manufacturer's labels intact and legible with verification of date of manufacture and shelf life.
- 6.2 Store materials in a protected area at a temperature between 40°F and 100°F.
- 6.3 Products shall be stored according to the manufacturer's requirements and shall avoid contact with soil and moisture. Products shall be stored to avoid UV exposure.

7.0 PRODUCTS

- 7.1 Acceptable Manufacturer and Composite Strengthening System
 - 7.1.1 Tyfo® Fibrwrap® System(s) are approved for this job and may be supplied by Fyfe Co. LLC (8380 Miralani Drive, San Diego, CA 92126. Tel: 858-642-0694, Fax: 858-444-2982, Email: info@fyfeco.com). Products include:
 - 7.1.2 Composite fabric: Tyfo® SCH-41 fiber is a unidirectional carbon fabric.
 - 7.1.3 Epoxy saturant/primer: Tyfo® S epoxy is used as a primer and is also combined with the fiber to form the Tyfo® Fibrwrap® System.
 - 7.1.4 Primer/Filler: Thickened Tyfo® S epoxy for protective seal coat, filling voids and primer where needed.
 - 7.1.5 Finishes: Tyfo® A for protection from ultraviolet and to provide long-term environmental durability. Alternate finishes must be approved by the owner.
 - 7.1.6 Field thickened epoxy matrix, which is compatible with composite system's resin matrix, may be used to patch "bugholes" up to 1.5" in depth and to fill voids.
- 7.2 The manufacturer shall provide specific information on physical, mechanical and chemical properties of fiber, epoxy resin and FRP composite.
- 7.3 **APPROVED FUNCTIONALLY EQUIVALENT PRODUCTS:** If bidder is submitting a bid on any product other than described in section 7.1, the bidder should submit descriptive literature and specifications on the product proposed, as outlined in 7.2, as well as information that pertains to any warranties on the products being offered.
 - 7.3.1 MoDOT's Project Coordinator will determine if products offered as functionally equivalent items meet or exceed the minimum specifications outlined in section 7.1, as published herein.
 - 7.3.2 The contractor shall agree and understand that all decisions by the Project Coordinator on the acceptability of any such products will be final and without recourse. Further, bidders are cautioned that submitted bids, as well as any information regarding proposed functionally equivalent products, shall be subject to acceptance by MoDOT without further clarification. It is the bidder's sole responsibility to submit all information related to this solicitation and that MoDOT is under no obligation to solicit such information if it is not included with the bid. Failure of the bidder to submit such information may cause an adverse impact on the evaluation of his/her submitted bid.

8.0 CERTIFIED APPLICATORS

- 8.1 Installations of the system shall be performed by certified applicators only. Certified applicators shall have the minimum experience and written consent as recommended by the FRP manufacturer (**See Sections 5.1 and 5.4 of this specification**)

9.0 OTHER MATERIALS

- 9.1 Contractor to provide compatible primer, filler and other materials recommended by the manufacturer as needed for the proper installation of the complete surface bonded FRP composite system.

10.0 APPLICATION

10.1 Surface Preparation

- 10.1.1 **Columns:** The surface to receive the composite shall be free from fins, sharp edges and protrusions that will cause voids behind the installed casing or that, in the opinion of the Engineer, will damage the fibers. Existing uneven surfaces to receive composite shall be filled with the system epoxy filler or other material approved by the Engineer. Filling of large voids in surfaces to receive composite shall be paid as an extra to the contract work of installing the composite system (small pinholes or micro-bubbles in the concrete surface or resin do not require special detailing). The contact surfaces shall have no free moisture on them at the time of application. If moisture is present, use the manufacturer suggested wet prime epoxy, if available.
- 10.1.2 **Mortar Type Repairs:** Any mortar type repairs that are required will be performed by MoDOT, if necessary. The contractor shall work with MoDOT so that any necessary repair work can be done and concrete cured prior to wrap installation. The existing pile is 16 inches in diameter (octagonal shaped). Necessary repairs will be made to the same general shape as the original piling.
- The contractor will correct irregularities in the surface to create a flat, or slightly convex, surface. Fill surfaces with thickened epoxy to eliminate air surface voids greater than 0.5" diameter. Well-adhered paint and concrete do not require removal.
- 10.1.3 **Corner Preparation:** Round off sharp and chamfered corners to a minimum radius of 0.75" by means of grinding or forming with the system's thickened epoxy. Variations in the radius along the vertical edge shall not exceed 0.5" for each 12" of column height.

11.0 INSTALLATION

- 11.1 Preparation work for project: Visit site at least two weeks prior to FRP application to ensure that all patch work is complete, cured and acceptable for wrap installation. Review project specifications in detail.
- 11.2 Verify ambient and concrete temperatures. No work shall proceed if the temperature of the concrete surface is less than 40°F or greater than 100°F or as specified on the epoxy component labels. The ambient temperature and temperature of the components shall be between 40°F and 100°F, unless provisions have been made to ensure components' temperature is maintained within this range or the range specified by the manufacturer.
- 11.3 Prepare the epoxy matrix by combining components at a weight (or volume) ratio specified by the manufacturer. The components of epoxy resin shall be mixed with a mechanical mixer until uniformly mixed, typically 5 minutes at 400-600 rpm.
- 11.4 Components that have exceeded their shelf life shall not be used.
- 11.5 Saturation of the fabric shall be performed and monitored according to the manufacturer's specified fiber-epoxy resin ratio. Fabric shall be completely saturated prior to application to contact surface in order to ensure complete impregnation. Saturation shall be supervised and checked by the certified installer. Both the epoxy resin and fabric shall be measured accurately,

combined, and applied uniformly at the rates shown on the approved working drawings and per manufacturer's recommendations.

- 11.6 All cutting of fabrics, mixing of epoxy and combination thereof shall take place in a protected area away from critical structure functions and any electrical equipment.
- 11.7 Prepare surfaces as required, including corner preparation.
- 11.8 Remove dust and debris by hand or with compressed air as per specification.
- 11.9 Clean up and protect area adjacent to element where FRP composite is being applied.
- 11.10 Using a roller or trowel, apply one prime coat of epoxy resin to the substrate (2 mil min.). Allow primer to become tacky to the touch.
- 11.11 Fill any uneven surfaces or recesses with thickened epoxy.
- 11.12 Apply saturated fabric to substrate surface by hand lay-up, using methods that produce a uniform, constant tensile force that is distributed across the entire width of the fabric, and ensure proper orientation of the fabric. Under certain application conditions, the system may be placed entirely by hand methods assuring a uniform, even final appearance. Gaps between composite bands may not exceed 0.5" width in the fabric's transverse joint unless otherwise noted on project drawings. A lap length of at least 6" is required at all necessary overlaps in the primary fiber direction of the fabric.
- 11.13 Apply subsequent layers, continuously or spliced, until designed number of layers is achieved, per project drawings.
- 11.14 Using a roller or hand pressure, release or roll out entrapped air, and ensure that each individual layer is firmly embedded and adhered to the preceding layer or substrate.
- 11.15 Detail all fabric edges, including termination points and edges, with thickened epoxy.
- 11.16 Finish: All edges and seams must be feathered. Use system as directed by the manufacturer. Finish as specified between 24 and 72 hours after final application of epoxy. If after 72 hours the epoxy is cured, the surface must be roughened by hand sanding or brush blasting, prior to finishing.
- 11.17 System may incorporate structural fasteners but limitations and detailing must be verified with composite system manufacturer.

12.0 INSPECTION AND TESTING

12.1 Field Inspection

- 12.1.1 The contractor shall monitor the mixing of all epoxy components for proper ratio and adherence to manufacturer's recommendations. Record batch numbers for fabric and epoxy used each day, and note locations of installation. Measure square footage of fabric and volume of epoxy used each day. Complete report and submit to Owner, engineer-of-record and FRP composite system manufacturer.
- 12.1.2 A Certified Special Inspector shall periodically observe all aspects of preparation, mixing, and application. All FRP composite applied areas shall be inspected, in accordance with the manufacturer's specifications for voids, bubbles, and delaminations. All defective areas shall be repaired as specified in Section 13.0 "Required Remediation".
- 12.1.3 The contractor shall provide a report signed by a registered professional engineer certifying that the installation is acceptable, complete with the testing reports and photographs.

12.2 Laboratory Testing and Sampling

- 12.2.1 Record lot number of fabric and epoxy resin used, and location of installation. Measure square footage of fabric and volume of epoxy used each day. Label each sample from each day's production.
- 12.2.2 A "sample batch" shall consist of two 12" by 12" samples of cured composite. A minimum of two "sample batches" shall be made daily. The two "sample batches" will be taken at appropriate times during the day as to ensure the maximum material deviance in the components of the FRP composite.

12.3 Preparation of Samples

- 12.3.1 Prepare sample on a smooth, flat, level surface covered with polyethylene sheeting, or 16 mil plastic film, prime with epoxy resin. Then place one layer of saturated fabric and apply additional topping of epoxy. Cover with plastic film and squeegee out all bubbles.
- 12.3.2 Samples shall be stored in a sample box and not moved for a minimum 48 hours after casting. The prepared, identified samples shall be given to a pre-approved and experienced testing laboratory. The laboratory shall then precondition samples for 48 hours at 140°F before testing.

12.4 ASTM D3039 – Tension Tests

- 12.4.1 Testing specimens shall be cut from samples and tested for ultimate tensile strength, tensile modulus and percentage elongation as per ASTM D3039 in the longitudinal fiber direction.
- 12.4.2 Test a minimum of 15% of all samples as per ICC AC178. If one coupon fails, specimens from the same 12" x 12" sample will be tested. If these specimens also fail, the other 12" x 12" sample from the same "sample batch" will be tested. In the extreme case that this sample also fails, the remaining "sample batch" for that day will be tested and appropriate remediation shall be taken to ensure integrity of the system at locations from the failed "sample batch". In addition, 25% of the remaining samples shall be tested by the same criteria as per ICC AC178.
- 12.4.3 Testing results shall be made available within 3 weeks of sample submission.

12.5 Acceptance Criteria

- 12.5.1 FRP design values must be lower than the calculated mean determined from the test results received from the ASTM D3039 field test specimens. Acceptable minimum values for ultimate tensile strength, tensile modulus, and elongation shall not be below the submitted design values.
- 12.5.2 Any values below the submitted design values are considered a failure and require remediation.

13.0 REQUIRED REMEDIATION

- 13.1 Small voids and bubbles [on the order of 3" diameter] shall be injected or back filled with epoxy.
- 13.2 Voids and delaminations on the order of 6" in diameter or an area of 5" x 5" shall be reported to the engineer of record and remediation shall be submitted by the contractor for approval.
- 13.3 In the event that laboratory testing determines a "sample batch" to possess insufficient material properties, remedial measures shall be taken. Any structural member where the installed FRP composite system has material properties determined to be below the minimum specified values, additional layers shall be installed until the composite thickness is increased by the same

percentage as the deficiency of the material's tensile modulus, or any other remediation directed by the engineer.

14.0 MAKE GOOD

- 14.1 Make good at no cost to the Owner, any damage to the new or existing structures, property or services caused by the installation and testing of the FRP composite.

15.0 CLEAN UP

- 15.1 Remove all surplus material, equipment and debris from the site on completion of the work. Leave the site clean.

16.0 PAYMENT

- 16.1 Payment for the material, delivered to the jobsite, will be based on the total square feet of material wrap required on the piling for each type of material – glass or carbon.

17.0 MEASUREMENTS:

- 17.1 The circumference around a typical pile is 4.5 linear feet. No final field measuring will be made in the field unless there is an increase or decrease in the deteriorated length or number of pilings to be treated, as determined in the field.
- 17.2 The cost of all labor, equipment and materials necessary to complete the product installation, including technical oversight, shall be included within the bid price. **Any mobilization fee will also be included in the price of the material.** Payment will be made from an invoice supplied by the contractor when the all systems are in place on the structure for the specific system required in section 2.1.

18.0 TRAFFIC CONTROL

- 18.1 Since all work is under the bridge, no traffic control is anticipated for the project. However, if the contractor needs lane closures he will be responsible to arranging for the necessary traffic control devices and must observe MoDOT's policies in securing lane closures.

19.0 PREVAILING SPECIFICATIONS

- 19.1 **All work must be in accordance with the Missouri Standard Specifications for Highway Construction, 2004 Edition, its latest supplements and the Scope of Work referenced herein.** The following web link will provide information on the Missouri Standard Specifications referenced herein:

http://www.modot.mo.gov/business/standards_and_specs/highwayspecs.htm

20.0 INSURANCE

- 20.1 Contractor must carry the Liability Insurance as listed in the Missouri Standard Specifications For Highway Construction, 2004 Edition, including all supplements. Proof of insurance will be required prior to final contract execution.

21.0 GENERAL BID INFORMATION

- 21.1 Contract Prices

All prices shall be firm and fixed. MoDOT shall not pay nor be liable for any other additional cost including but not limited to taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, etc. The Contractor shall not invoice federal, state or local taxes. Payment for all services herein shall be made in arrears.

21.2 Contract Period and Completion Date

Upon notice to proceed the Contractor shall until September 1, 2011 to complete the work. The work shall be conducted during the course of a normal work week (Monday thru Friday), unless otherwise approved by the Project Coordinator. Unless otherwise approved by the Project Coordinator, no work will be permitted on official state holidays.

21.3 Compliance with Mandatory Requirements

Bids will be reviewed to determine if it complies with the mandatory requirements and to determine the lowest and responsive bid.

21.4 Inspection

All work will be inspected during the course of the project. A final inspection will be made to determine compliance of standard specifications.

21.5 Open Competition/Request For Bid Document

It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source.

Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the RFB Coordinator from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received by the date outlined in the RFB Events Schedule published herein.

21.6 Bidder Information and Prequalification to Bid

A contractor bidding on a MoDOT highway construction project must have a contractor questionnaire on file with the Commission. Submit completed Contractor Questionnaire with attachments not later than seven (7) calendar days prior to the date and hour of the bid opening. See Sec 102.2 of the Missouri Standard Specifications for Highway Construction, and Rule 7 CSR 10-15.900, "Prequalifications to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website at <http://www.modot.org/business/BecomeAMoDOTPrimeContractor.htm>.

21.7 General Wage Order

The awarded contractor shall be required to comply with the wages as fixed by the Missouri Department of Labor and Industrial Relations (DOLIR). **General Wage Order No. 54**, attached herein, as published by the Missouri Department of Labor and Industrial Relations is in effect. If awarded the contract, the Contractor shall be responsible for submitting notarized weekly payroll affidavit documentation included with the project request for payment. The successful vendor must provide a lien waiver from all material suppliers. At the time of this bid, please note that 'Excessive Unemployment Is In Effect' which is defined by the Missouri Department of Labor as:

Excessive Unemployment and Restrictive States

"EXCESSIVE UNEMPLOYMENT IS IN EFFECT"

Only Missouri laborers and laborers from nonrestrictive states are allowed by law to be employed on Missouri's public works projects when the unemployment rate exceeds 5 percent for two consecutive months. **(See Sections 290.550 through 290.580 RSMo).**

Restrictive states are as follows: Alaska, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Idaho, Illinois, Iowa, Maine, Massachusetts, Mississippi, Montana, Nevada, New Jersey, North Dakota, Oklahoma, South Dakota, and the U.S. Virgin Islands, West Virginia and Wyoming.

Link to DOLIR where additional information and forms can be found.

http://www.labor.mo.gov/div_pubs_forms.asp#DLS

21.8 Bid Guaranty and Contract Bond

This bid and its opening is unable to use the resource of the 'Electronic Bid Bond' that is kept on file with our Design and Construction Division. Please submit an individual bid bond or alternative as indicated herein. The use of 'Electronic Bid Submittal' as offered through the Design and Construction monthly bid lettings is also not in use for this bid submittal. Returned *Sealed Bids* are required for this solicitation.

- a. Each bid shall be accompanied by a Bid Bond, Certified Check, Cashier's Check or Bank Money Order payable to the Director of Revenue – Credit State Road Fund for an amount equal to Five Percent (5%) of the amount of the BID submitted. This is to act as a guarantee that the bidder, if awarded the contract, will furnish an acceptable performance and payment bond (Contract Bond) or a cashier's check, a bank money order or a certified check made payable to "Director of Revenue--Credit State Road Fund" in an amount equal to One Hundred (100%) of the contract price.
- b. If a BID BOND is used (in lieu of a certified check, cashier's check, or bank money order), it must be in the form provided and executed by the bidder as principal and by a surety company authorized to do business in the State of Missouri as surety. The agent executing the same on behalf of the surety company must attach a current Power of Attorney setting forth his authority to execute the bond involved.
- c. Certified Checks, Cashier's Checks or Bank Money Orders of unsuccessful bidders will be returned as soon as the award is made. The checks or bank money orders of the successful bidder(s) will be retained until the contract is executed and a satisfactory Performance and Payment (Contract Bond) is furnished. Bid Bonds will not be returned except on specific request of the bidder.

21.9 Failure to Execute the Contract

Failure to execute the contract and file acceptable performance payment (Contract Bond) or cashier's check, bank money order or certified check within **15 calendar days** after the contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and performed under contract or otherwise, as the

Commission may decide. No contract shall be considered effective until it has been executed by all parties thereto.

21.10 Liquidated Damages

The vendor/contractor shall have a *completion date of September 1, 2011*. The bidder should be aware that the work area is often subject to flooding in the spring and summer. Failure to complete the project within the deadline will result in liquidated damages of \$100 per work day, until the project is complete. The contractor must also be aware of the potential for other contractors or MoDOT personnel to be in the area doing other project work.

21.11 Award/Cancellation

The contract will be awarded by the Commission to the lowest responsible bidder. Notification of award will be at the time the tabulation is posted to the Internet. See Section 103.2.1 of the Missouri Standard Specifications For Highway Construction, 2004 Edition.

http://www.modot.mo.gov/business/standards_and_specs/highwayspecs.htm

MoDOT reserves the right to cancel this bid at any time. Failure to comply with the requirements published in this bid may result in the bid being subject to rejection.

21.12 Invoicing Requirements

The contractor shall submit an itemized invoice on Company Letterhead. The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document. Other than the payment specified on the pricing page, no additional charges, including fuel surcharges, shall be made to the contractor for any reason.

21.13 Minority and Women Business Enterprise Participation

Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

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22.0 PRICE PAGE

- 22.1 The bidder shall provide prices in the space provided below for the services outlined in the provisions and requirements of this RFB. **All costs**, including but not limited to mobilization, demobilization, travel, per diem, personnel, insurance, etc., associated with providing the required services shall be included in the provided spaces.
- 22.2 **AWARD:** The vendor may bid on both systems or on only one of the system options. Award will be based on the total price to perform the repairs based on each system. The vendor **must submit on the bid form the total square feet of material required for each piling for each system** on which he/she submits a bid.
- 22.2.1 ***The vendor does not have to bid on both systems.*** The award will be separate for both the glass and carbon products. No adjustments will be made to product pricing or mobilization if different vendors get the award for the two different systems.
- 22.3 Complete the form, ***sign where indicated below***, and submit with your signed bid form and other required documentation.

<u>BID #</u>	<u>Description</u>	<u>Brand/Manuf</u>	<u>Unit of Measure</u>	<u>Total Sq. Ft. of Material Required</u>	<u>Cost per Sq. Foot</u>	<u>Extended Total</u>
No. 1	Carbon-Based Material		Square Foot		\$	\$
No. 2	Glass-Based Material		Square Foot		\$	\$

Name of the Bidders Firm: _____

Name & Signature of Contractor's Authorized Representative

Date Signed

Telephone

Email

***** It is the sole responsibility of the bidder to check for addendums during the time this project is out for bid and to ensure their bid price reflects any addendum.*****

23.0 NOTES ON ADDITIONAL AWARD AND CONTRACT INFORMATION REQUIREMENTS

- 23.1 All awarded bidders **MUST be in full accordance with the following before contract can be fully executed:**
- 23.1.1 **TAX CLEARANCE CERTIFICATE:** MoDOT is precluded from contracting with a vendor or its affiliate who makes sales at retail of tangible personal property or for the purpose of storage, use or consumption in this state but fails to collect and properly pay the tax as provided in RSMo 144. Please contact the Department of Revenue at (573) 751-9268 for additional information on obtaining a Tax Clearance Certificate.
- 23.1.2 **SECRETARY OF STATE FILING:** The vendor must be in good standing with the Missouri Secretary of State's office prior to issuance of 'Notice to Proceed.' Their phone number is (573) 751-4936.
- 23.1.3 **E-VERIFY PROGRAM:** Pursuant to 285.530 RSMo, the bidder must affirm its enrollment and participation in a federal work authorization program with respect to the employees proposed to work in connection with the services requested herein by:
- a. Submitting a completed, notarized copy of AFFIDAVIT OF WORK AUTHORIZATION, and
 - b. Proving documentation affirming the bidder's enrollment and participation in a federal work authorization program (see below) with respect to the employees proposed to work in connection with the services request herein.
 - c. E-verify is an example of a federal work authorization program. Acceptable enrollment and participation documentation consists of completed copy of the E-Verify Memorandum of Understanding (MOU). For vendors that are not already enrolled and participating in a federal work authorization program. E-Verify is available at http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm
- 23.1.4 **VENDOR REGISTRATION FORM:** Awarded Vendor may be required to fill out a Vendor Registration Form if vendor has not conducted business with the State of Missouri within the last five (5) years, in order to allow the Missouri Department of Transportation to pay invoices.
- 23.1.5 **VENDOR'S RESPONSIBILITY TO PROVIDE DOCUMENTATION:** If it cannot be determined that a vendor is compliant with the above, it shall be the vendors responsibility to provide the documentation within a reasonable amount of time in relation to the requirements within the bid.

~ Reminder of page intentionally left blank. ~

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____,
as Principal and _____, as Surety are held and
firmly bound unto the **STATE OF MISSOURI** (acting by and through the **Missouri Highways and
Transportation Commission**) in the penal sum of:

_____ **Dollars (\$_____)**
to be paid to the **State of Missouri or to the Missouri Highways and Transportation Commission**, to
be credited to the State Road Fund, the Principal and Surety binding themselves, their heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this _____.

THE CONDITION OF THIS OBLIGATION is such that:

WHEREAS, the Principal is submitting herewith a bid to the Missouri Highways and Transportation
Commission for furnishing *Installation of Externally Bonded Fiber Reinforced Polymer Composite to
Strengthen Cast-In-Place Concrete Piles* as set out in the bid to which this bond is attached.

NOW THEREFORE, if the Missouri Highways and Transportation Commission shall accept the bid of
the Principal and if said Principal shall properly execute and deliver to the Missouri Highways and
Transportation Commission the contract and contract bond in compliance with the requirements of the
proposal, the specifications and the provisions of law, to the satisfaction of the Highways and
Transportation Commission, then this obligation shall be void and of no effect, otherwise to remain in full
force and effect.

In the event the said Principal shall, in the judgment of the Missouri Highways and Transportation
Commission, fail to comply with any requirement as set forth in the preceding paragraph, then the State of
Missouri acting through the Missouri Highways and Transportation Commission shall immediately and
forthwith be entitled to recover the full penal sum above set out, together with court costs, attorney's fees
and any other expense of recovery.

(SEAL)

Principal

By _____

Signature

(SEAL)

Surety

By _____

Attorney-in-Fact

NOTE: This bond must be executed by the **PRINCIPAL** and by a **CORPORATE SURETY** authorized
to conduct surety business in the State of Missouri.

SIGNATURE AND IDENTITY OF BIDDER

The undersigned states that the correct LEGAL NAME and ADDRESS of (1) the individual Bidder, (2) each partner or joint venture (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention of binding himself to become the responsible and sole contractor) he is the agent of, and duly authorized in writing to sign for the Bidder or Bidders; and that he is signing and executing this (as indicated in the proper spaces below) as the proposal of a

() sole individual () partnership () joint venture

() corporation, incorporated under laws of state of _____

Dated _____.

Name of individual, all partners,
or joint ventures:

Address of each:

doing business under the name of:

Address of principal place of business in Missouri

(If using a fictitious name, show this name above in addition to legal names)

(If a corporation, show its name above)

ATTEST: (SEAL)

Secretary	Title
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(NOTE: If the Bidder is doing business under a FICTITIOUS NAME, the Proposal shall be executed in the legal name of the individual, partners, joint ventures, or corporation, with the legal address shown, and REGISTRATION OF FICTITIOUS NAME filed with the Secretary of State, as required by Sections 417.200 to 417.230, RS Mo. If the Bidder is a CORPORATION NOT ORGANIZED UNDER THE LAWS OF MISSOURI, it shall procure a CERTIFICATE OF AUTHORITY TO DO BUSINESS IN MISSOURI, as required by Section 351.570 and following, RS Mo. A CERTIFIED COPY of such Registration of Fictitious Name or Certificate of Authority to do Business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the Standard specifications, Sec 102.6.6 and 102.6.7.)

ANTI-COLLUSION STATEMENT

STATE OF _____)
) SS.
COUNTY OF _____)

_____ being first
duly sworn, deposes and says that he is _____
Title of Person Signing
of _____

Name of Bidder

that all statements made and facts set out in the proposal for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____, 20____.

Notary Public

My Commission Expires _____

PREFERENCE IN PURCHASING PRODUCTS

DATE: _____

The bidders attention is directed to Section 34.076 RsMO 1986 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products.

Bids/Quotations received will be evaluated on the basis of this legislation.

All vendors submitting a bid/quotation must furnish ALL information requested below.

FOR CORPORATIONS:

State in which incorporated: _____

FOR OTHERS:

State of domicile: _____

FOR ALL VENDORS:

List address of Missouri offices or places of business:

THIS SECTION MUST BE COMPLETED AND SIGNED:

FIRM NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

TELEPHONE: _____

BY (signature required): _____

Federal Tax I.D. #: _____ **if no Federal Tax I.D. # - list Social Security #:** _____

MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT

The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34.359, RsMO, which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States.

Section 34.355, RsMO, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RsMO, at the time of bidding **and** prior to payment. Failure to comply with Section 34.353, RsMO, during the performance of the contract **and** to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Section 34.353.2, RsMO, specifies that it does not apply where the total contract is less than Twenty-Five Thousand Dollars (\$25,000.00). If your total bid is Twenty-Five Thousand Dollars (\$25,000.00) or more, you **must** complete this form as directed below.

Failure to complete and return this document with this bid will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis. Please read the certification appearing below on this form.

- [] If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left.
- [] If only one item of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left and list the items (or item number) here:

- [] If any or all of the goods or products specified in the attached bid which the bidder proposes to supply to the State are **not** manufactured or produced in the "United States" as defined in Section 34.350, RsMO, then: (a) check the box at left; (b) list below, by item (or item number), the country other than the United States where each good or product is manufactured or produced; and (c) check the boxes to the left of the paragraphs below if applicable and list the corresponding items (or item numbers) in the spaces provided.

Item (or item number)	Location Where Item Manufactured or Produced

(attach an additional sheet if necessary)

- [] The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications. Items (or item numbers): _____

- [] The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement, or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade. Items (or item numbers): _____

CERTIFICATION

By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making false declaration (Section 575.060, RsMO) that the information contained in this document is true, correct and complete, and may be relied upon by the State in determining the bidders qualifications under and in compliance with the Missouri Domestic Products Procurement Act.

Vendor Name: _____ **Signature:** _____

APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP

(a separate affidavit is required for each owner and general partner)

IF YOUR BUSINESS IS A SOLE-PROPRIETORSHIP OR PARTNERSHIP, THIS AFFIDAVIT FORM SHOULD BE COMPLETED AND RETURNED PRIOR TO ANY FINAL CONTRACT EXECUTION.

A fax copy of this document is acceptable with the understanding a hard copy will follow by mail.

STATE OF _____)
) ss
COUNTY OF _____)

On this _____ day of _____, 20____, before me appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instruments, who being by me duly sworn, deposed as follows:

My name is _____, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 208.009, RSMo, for failure to provide affirmative proof of lawful presence in the United States of America:

I am the _____ of _____, which is applying for a public benefit (grant
owner or partner business name
contract, and/or loan) administered/provided by the Missouri Highways and Transportation Commission (MHTC), acting by and through the Missouri Department of Transportation (MoDOT).

I am classified by the United States of America as: (check the applicable box)

___ a United States citizen. ___ an alien lawfully admitted for permanent residence.

I am aware that Missouri law provides that any person who obtains any public benefit by means of a willfully false statement or representation, or by willful concealment or failure to report any fact or event required to be reported, or by other fraudulent device, shall be guilty of the crime of stealing pursuant to Section 570.030, RSMo, which is a Class C felony for stolen public benefits valued between \$500 and \$25,000 (punishable by a term of imprisonment not to exceed 7 years and/or a fine not more than \$5,000 – Sections 558.011 and 560.011, RSMo), and is a Class B felony for stolen public benefits valued at \$25,000 or more (punishable by a term of imprisonment not less than 5 years and not to exceed 15 years – Section 558.011, RSMo).

I recognize that, upon proper submission of this sworn affidavit, I will only be eligible for temporary public benefits until such time as my lawful presence in the United States is determined, or as otherwise provided by Section 208.009, RSMo.

I understand that Missouri law requires MHTC/MoDOT to provide assistance in obtaining appropriate documentation to prove citizenship or lawful presence in the United States, and I agree to submit any requests for such assistance to MHTC/MoDOT in writing.

I acknowledge that I am signing this affidavit as a free act and deed and not under duress.

Affiant Signature

Affiant's Social Security Number or
Applicable Federal Identification Number

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My commission expires:

IF YOUR BUSINESS IS NOT A SOLE-PROPRIETORSHIP OR PARTNERSHIP, THIS AFFIDAVIT FORM SHOULD BE COMPLETED AND RETURNED WITH YOUR RESPONSE TO THIS REQUEST FOR QUOTATION.

A fax copy of this document is acceptable with the understanding a hard copy will follow by mail.

**WORKER ELIGIBILITY VERIFICATION AFFIDAVIT FOR ALL
MHTC/MODOT CONTRACT AGREEMENTS IN EXCESS OF \$5,000**
(for joint ventures, a separate affidavit is required for each business entity)

STATE OF _____)
) ss
COUNTY OF _____)

On this _____ day of _____, 20____, before me appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, deposed as follows:

My name is _____, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 285.530, RSMo, to enter into any contract agreement with the state to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities:

I am the _____ of _____, and I am duly authorized, directed, and/or
title business name
empowered to act officially and properly on behalf of this business entity.

I hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, and the aforementioned business entity shall participate in said program with respect to all employees working in connection to work under the within state contract agreement with the Missouri Highways and Transportation Commission (MHTC). I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo.

In addition, I hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection to work under the within state contract agreement with MHTC, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3).

I am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

I acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and not under duress.

Affiant Signature

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My commission expires:

MISSOURI SERVICE-DISABLED VETERAN BUSINESS PREFERENCE

By virtue of statutory authority a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.

Definitions:

Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

Service-Disabled Veteran Business is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

If an Offeror meets the definitions of a service-disabled veteran and a service-disabled veteran business as defined in Missouri statute and is either doing business as a Missouri firm, corporation, or individual; or maintains a Missouri office or place of business, the Offeror **must** provide the following with the proposal in order to receive the Missouri service-disabled veteran business preference over a non-Missouri service-disabled veteran business when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing proposals, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the Offeror's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the Offeror was in, stating that the Offeror has a service-connected disability rating ranging from 0 to 100% disability; and
- b. A completed copy of this exhibit

(NOTE: For ease of evaluation, please attach copy of the above-referenced letter from the VA or a copy of the Offeror's discharge paper to this Exhibit.)

By signing below, I certify that I meet the definitions of a service-disabled veteran and a service-disabled veteran business as defined in Missouri statute and that I am either doing business as a Missouri firm, corporation, or individual; or maintain Missouri offices or places of business at the location(s) listed below.

Veteran Information

Business Information

Service-Disabled Veteran's Name, (Please Print)

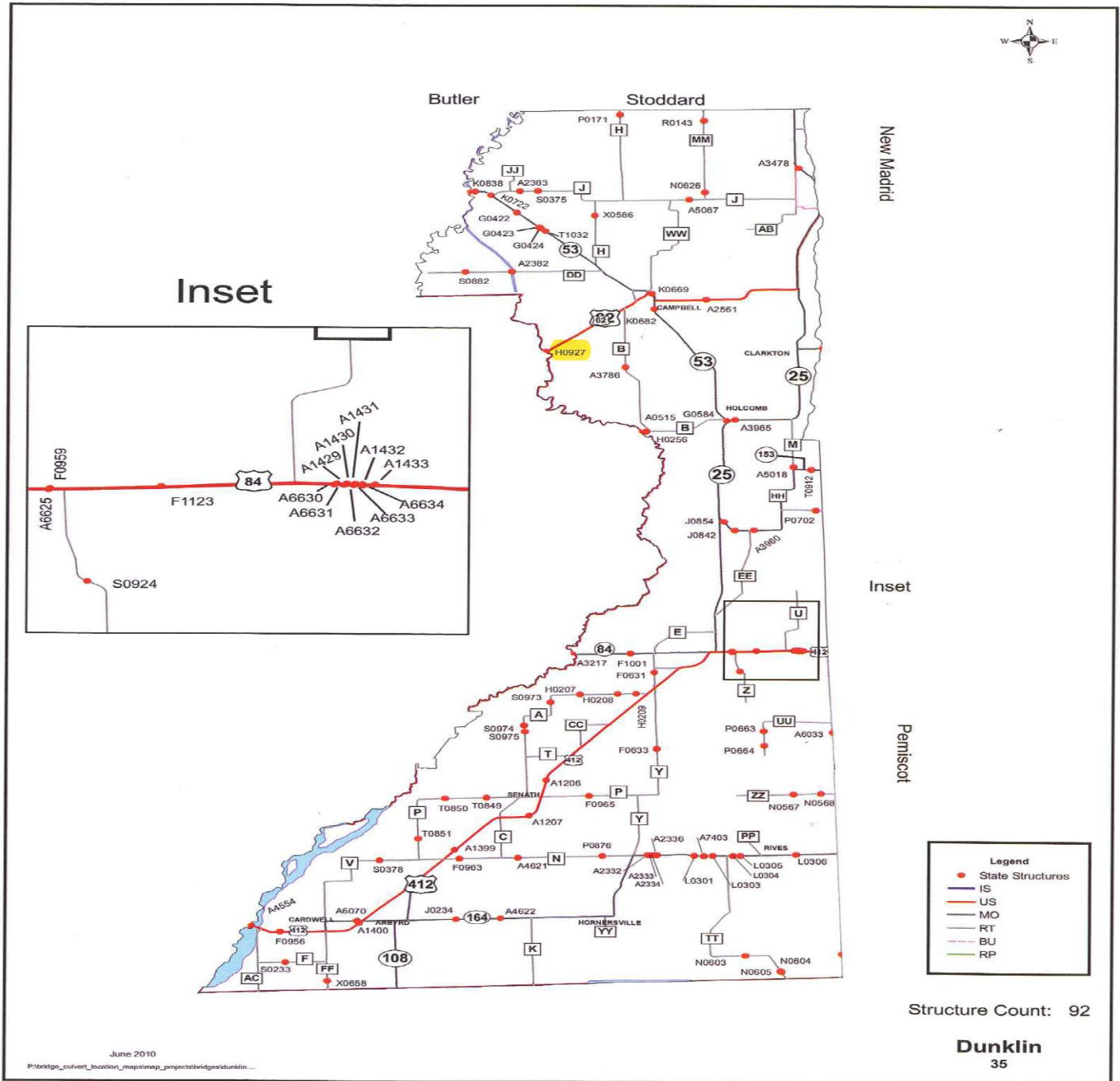
Service-Disabled Veteran Business Name

Service-Disabled Veteran's Signature

Missouri Address of Service-Disabled Veteran
Business

ATTACHMENT A – PAGE 1 OF 2

BRIDGE LOCATION MAP DUNKLIN COUNTY MISSOURI



ATTACHMENT A – PAGE 2 OF 2

**BRIDGE PHOTOS
DUNKLIN COUNTY, MISSOURI**

